REMARKS

Claims 1, 2, 5, 7, 9, 10, and 15-20 are now pending in this application for which applicant seeks reconsideration.

Amendment

Independent claims 1 and 9 have been amended in light of the examiner's comments, and new claims 17-20 have been added. No new matter has been introduced.

Art Rejection

Claims 1, 2, 5, 7, 9, 10, 15, and 16 remain rejected under 35 U.S.C. § 103(a) as unpatentable over Tanaka (USPGP 2003/0052841) in view of Lee (USP 6,693,609) and Weitbruch (USP 6,473,464). The examiner merely relied upon Lee for the proposition that having a plurality of subfields weighted with different brightness level would have been obvious. Otherwise, it appears that the examiner has essentially maintained the same rejection.

Specifically, applicant previously argued that Weitbruch would not have taught feature (iii) of making an average emission rate, which is an average value (e.g., average SF1 of S1-S4) of the plurality of pieces of emission pattern information of the same subfield among the plurality of groups of the plurality of subfields, for each of the subfields, with the brightness weight smaller than the maximum brightness weight of a subfield in which an average emission rate thereof is not zero, equal to or greater than 0.75.

In response, the examiner is maintaining that some pixel areas of the image displayed in Weitbruch's Figs. 1 and 2 would invariably meet the claimed limitation. That is, according to the examiner, the independent claims are met if any portion of the image (that is not totally black) contains a subfield having an average emission rate of 0.75 or greater.

Applicant submits that the examiner's claim construction is improper because the claims call for each of the subfields to have an average emission rate of 0.75 or greater. Nonetheless, to expedite prosecution, independent claims 1 and 9 have been further amended as follows to include the following features for clarification purposes:

(1) Forming a subfield group (see Fig. 1, the "Subfield" row) that includes a plurality of subfields (e.g., SF1-SF10) each weighted with a brightness weight (see the "Weight of Gradation level" row (e.g., 1-80)) in a field.

(2) Forming emission pattern information, which is combination of binary values, that indicate an emitted state by a value of "1" or a non-emitted state by a value of "0" corresponding

every subfield in the subfield group. See Fig.1, which illustrates an emission pattern information as a combination of binary values "1" or "0" (e.g., subfield SF1 = "1", subfield SF2 =1 ...).

(3) Forming each of gradation levels to be displayed using an average value of gradation levels of predetermined plural pieces (e.g., S1, S2, S3, S4) of emission pattern information. In Fig.1, the average values of gradation levels of the 4 pieces of emission pattern information S1, S2, S3, S4 is used. For example, in Fig. 1, gradation level of 165 is displayed using the average gradation levels of S1=175, S2=175, S3=147, S4=163 (175+175+147+163)/4=165).

(4) Making an average emission rate for **every subfield** to be defined by averaging the binary values corresponding to each of the same subfield. In Fig.1, for example, an average emission rate (for SF5) is (1+1+1+0)/4 = 0.75.

(5) The predetermined pieces of emission pattern information are preliminarily set for each of the gradation levels to be displayed so that the average emission rate of any subfield with a brightness weight smaller than the maximum brightness weight is equal to or greater than 0.75 among the subfields where the average emission rate is not zero. For example, in Fig. 1, 4 pieces of emission pattern information (S1-S4) are set for each of the gradation levels (see Figs. 2-10). For example, 4 pieces of emission pattern information is set for the gradation level "2," 4 pieces of emission pattern information is set for the gradation level "3" and so on. Further, for example for the gradation level "8" in Fig. 2, the subfields where the average emission rate is not zero are SF1, SF2, SF3, and SF4. In the subfields of SF1 (weight = "1"), SF2 (weight = "2"), SF3 (weight = "4"), SF4 (weight = "8"), the subfield of the maximum brightness weight "8" is SF4. The subfields with the brightness weight smaller than the maximum brightness weight are SF1, SF2, and SF3. As shown, the gradation level "8" in Fig. 2, each average emission rate of SF1, SF2, SF3 is equal to or greater than 0.75. That is, average emission rate of SF1 is "1", the average emission rate of SF2 is "1" and average emission rate of SF3 is "0.75" for the gradation level "8" in Fig. 2.

The examiner argues that Weitbruch teaches an average emission rate 0.75 or greater in locations where a continuum of brightness, brightness of pixels are the same. But that merely applies to a specific gradation level. Independent claim 1 now clarifies that the predetermined pieces of emission pattern information are preliminarily set for each of the gradation levels to be displayed so that the average emission rate of any subfield with the brightness weight smaller than the maximum brightness weight is equal to or greater than 0.75 among the subfields where the average emission rate is not zero. That is, claim 1 calls for setting the plural emission pattern information so that the average emission rate thereof for each of the gradation levels to

be displayed is equal to or greater than 0.75, not merely setting the average emission rate to be equal to or greater than 0.75.

Moreover, as to claimed feature (3) above, applicant submits that Lee would not have disclosed or taught displaying one gradation level using predetermined plural pieces of emission pattern information.

Even if the combination urged by the examiner were deemed proper for argument's sake, applicant submits that the combination would not have taught at least the claimed features (3)-(5) outlined above.

Conclusion

Applicant submits that the pending claims patentably distinguish over the applied references and are in condition for allowance. Should the examiner have any issues concerning this reply or any other outstanding issues remaining in this application, applicant urges the examiner to contact the undersigned to expedite prosecution.

Respectfully submitted,

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22 DECEMBER 2010
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